

Name: _____

Date: _____ Period: _____

Probability and Statistics Test

Score: _____ = _____ %
35

Are the two events dependent or independent? Explain. **(4 points)**

Pick a name from a hat. Without replacement, pick another name from the hat.

Tossing a nickel and rolling a die.

The community council wants to survey the students to find out what t-shirt they want for the field day. Answer the following questions in as much detail as you can.

Population **(1 point)**

Sample **(1 point)**

How should we pick the students? Conduct a simple random sample. Explain how it is a SRS. **(2 points)**

A large corporation wants to find out which brand of computers the employees would like to use. Which procedure would most likely produce an **unbiased** sample? WHY? **(2 points)**

A. Place suggestion boxes at random locations in the company's offices.

B. Invite all employees to indicate their opinion by responding to an e-mail.

C. Survey a random sample of employees from a list of all employees.

Choice: _____

Draw a double stem-and-leaf plot for the data. **(2 points)**

Larry: 78, 95, 91, 100, 85, 80, 93

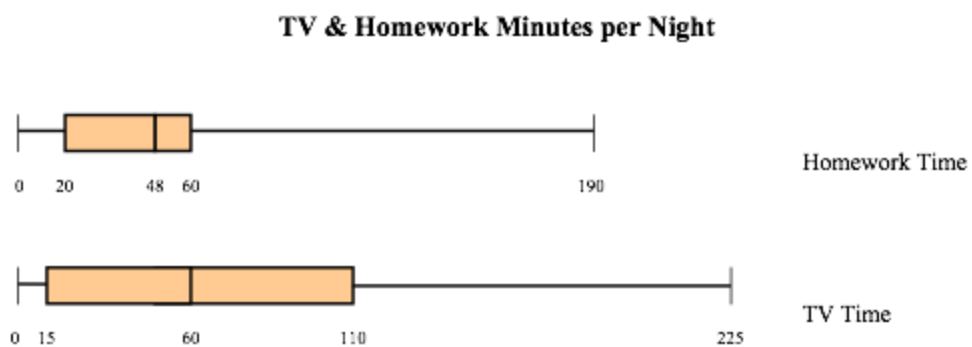
Moe: 85, 93, 99, 80, 65, 86, 94

If these were test scores, out of 100, who did better overall? How do you know? **(1 point)**

If Larry wants to have an average of 90, what does he need to get on their next test?
(2 points)

Which measure of central tendency best describes Moe's data? Explain. **(2 points)**

Complete the chart below for the box-and-whisker plot. **(5 points)**



	Homework Time	TV Time
Minimum		
Lower Quartile		
Median		
Upper Quartile		
Maximum		

Answer the following questions based on the box-and-whisker plot above. **(3 points)**

What percent of students watch TV for at least 15 minutes per night?

Is it more common for a 7th grader to spend more than 1 hour on homework, or watch more than 1 hour of TV? Explain.

Math Honor Code: Please copy this statement below, then sign your name.
My signature certifies that this is my work. I did not give or receive help on it.

X _____

(10 points)

Explain how you would find your solution. Be sure to follow a beginning, middle, and end format. Use the statement -> evidence method, while describing why/how you chose this solution.

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